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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,246	09/22/2003	Kazunari Tonami	242243US2	9509
22850	7590	11/02/2005	EXAMINER	
OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			ELVE, MARIA ALEXANDRA	
		ART UNIT		PAPER NUMBER
		1725		

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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NOV 04 2005

10-305
RECEIVED: _____
OBLON, SPIVAK, McCLELLAND
MAIER & NEUSTADT, P.C.
DOCKETING DEPT.
Initials/Date Docketed: _____
Type of Resp(s): _____
Due Date(s): _____

Office Action Summary	Application No.	Applicant(s)
	10/666,246	TONAMI ET AL.
	Examiner	Art Unit
	M. Alexandra Elve	1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 August 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8, 12, 13, 15 and 17-29 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-13, 15 and 17-29 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 September 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 09/806,613.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/18/05</u> | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Terminal Disclaimer

The terminal disclaimer filed on 8/18/05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 09/806,613 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 12-13, 15, 17-21, 27 & 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Corrsin (USPN 3,477,194).

Corrsin discloses the sealing of thermoplastic thin materials using infrared radiation and a carbon material in between the materials. The carbon substance is printed onto a board, which is faced or overlaid with a thermoplastic material. The coating and film are welded throughout the area overlying the infrared absorbing material. Absorbers may also be in form of inks. Lamps or carbon dioxide lasers can be used. An absorber can be a visually transparent radiation absorber that is selective to radiation in a certain range of wavelengths. Radiation is chosen in a certain range of wavelengths, in this case infrared. Specifically two plastic films where one film is a

pigmented film and the other film are visually transparent. The layer of material, which is capable of absorbing radiation, is interposed between the two films in the areas to be sealed and the package is irradiated. Hence the films are sealed together by a substantially visually transparent radiation absorber, which selectively absorbs radiation, thus causing a concentration in heat in areas where such absorber has been applied and thereby effecting sealing. (abstract, figures, col. 1, lines 20-50, col. 2, lines 24-57, col. 3, lines 30-71, col. 4, lines 5-50)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-8, 12-13, 15 & 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muellich (USPN 5,893,959) and in view of Corrsin.

Muellich discloses the welding of thermoplastic materials using a laser beam. The transmission coefficient is used in the formation of a bond. Workpieces may be opaque, colored with dye or transparent. After welding, the individual workpiece parts are substantially no longer distinguishable by the human eye. The proportions of the workpiece parts are joined in the visible region and dye pigment may be used for

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joining. Wavelengths of 1.06 um may be used. (abstract, figures, col. 3, lines 5-10, col. 7, lines 40-65, col. 8, lines 34-67).

Muellich does not specifically teach use of the infrared.

Corrsin discloses the sealing of thermoplastic thin materials using infrared radiation and a carbon material in between the materials. (abstract, figures, col. 1, lines 20-50, col. 2, lines 24-57, col. 3, lines 30-71, col. 4, lines 5-50)

It would have been obvious to one of ordinary skill in the art at the time of the invention to use infrared radiation as taught by Corrsin in the Muellich process because it is a known wavelength to impart welding and hence is a functional equivalent.

Claims 22-26 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corrsin, as stated in the above paragraph and further in view of Osborne (USPN 4,069,080).

Corrsin does not specifically teach the use of fabrics/textiles, polyester, fluoropolymer and so forth.

Osborne discloses bonding superposed sheets of polymeric material. A CO₂ gas laser is used for welding the plastic materials, as the energy in the beam generated by the laser has wavelengths that are readily absorbed in the thermoplastic materials such as copolymers of vinyl chloride and vinylidene chloride and so forth. It would have been obvious to one of ordinary skill in the art at the time of the invention to sheet material, thermoplastics and so forth because this is merely a design substitution.

The types of materials chosen are a choice in design and substitutions of known equivalent structures may be made. In re Kuhle 188 (CCPA 1975) and In re Ruff 118 USPQ 343 (CCPA 1958). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a fluoropolymer because it is a polymeric substitute.

Claims 22-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muellich and Corrsin, as stated in the above paragraph and further in view of Osborne.

Muellich does not specifically teach the use of fabrics/textiles, thin films, polyester, fluoropolymer or nylon.

Osborne discloses bonding superposed sheets of polymeric material. A CO₂ gas laser is used for welding the plastic materials, as the energy in the beam generated by the laser has wavelengths that are readily absorbed in the thermoplastic materials such as copolymers of vinyl chloride and vinylidene chloride and so forth. It would have been obvious to one of ordinary skill in the art at the time of the invention to sheet material, nylon and so forth because this is merely a design substitution.

The types of materials chosen are a choice in design and substitutions of known equivalent structures may be made. In re Kuhle 188 (CCPA 1975) and In re Ruff 118 USPQ 343 (CCPA 1958). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a fluoropolymer because it is a polymeric substitute.

Response to Arguments

Applicant's arguments with respect to claims 1-8, 12-13, 15, 17-29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is 571-272-1173. The examiner can normally be reached on 6:30-3:00 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 22, 2005.



M. Alexandra Elve
Primary Examiner 1725

Form PTO-1449 U.S. Department of Commerce Patent and Trademark Office		ATTY DOCKET NO. <u>GJE-5825C1</u>	SERIAL NO. <u>10/666,264</u>
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT: <u>Ian Anthony Jones et al.</u>	EXAMINER <u>M. Alexandra Elve</u>
		FILING DATE: <u>September 19, 2003</u>	GROUP <u>1725</u>
O I P E AUG 18 2005 JCA8 PATENT & TRADEMARK OFFICE			

U.S. PATENT DOCUMENTS

Exam. Init.	Document Number	Date	Name	Class	Sub Class	filing date if appropriate
AC	3,477,194	11/11/69	Corrsin	53	33	

FOREIGN PATENT DOCUMENTS

Init.	Document Number	Date	Country	Class	Sub Class	Translation Yes/No
AC	JP06297828	10/25/94	Japan			Yes - Abstract
↓	JP04-157082	5/29/92	Japan			Yes - Abstract
↓	JP62-142092	6/25/87	Japan			Yes - Abstract
↓	JP09-220765	8/26/97	Japan			Yes - Abstract
AC	JP08-230043	9/10/96	Japan			Yes - Abstract

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AC	H. Putz et al., "Quality Improvement Of Polymer Parts By Laser Welding", SPIE Vol. 2207 pp. 392-399 (in Proceedings EUROPTO Series – Laser Materials Processing: Industrial And Microelectronics Applications, April 5-8 1994)

EXAMINER M. Alexandra Elve DATE CONSIDERED 10/22/05

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Pai - Please return
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IMPORTANT MESSAGE			
FOR	J. Beffetta		
DATE	Tue 11/01/05	TIME	3:30 AM.
TO	M. Alexandra (?)		
OF	USPTO		
PHONE	571-272-1173	AREA CODE	NUMBER
<input type="checkbox"/> FAX			EXTENSION
<input type="checkbox"/> MOBILE	AREA CODE	NUMBER	TIME TO CALL
TELEPHONED	✓	PLEASE CALL	
CAME TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		RUSH	
RETURNED YOUR CALL		SPECIAL ATTENTION	✓
MESSAGE	SN 10/666,246 C.R. belongs to another agn. Please return C.R.		
SIGNED			

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